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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/423,155	11/02/1999	PETER HEILAND	H98HEL1149U 6403		
7	7590 05/05/2004 EXAMINER		INER		
M ROBERT KESTENBAUM 11011 BERMUDA DUNES NE			LUU, THANH X		
	UE, NM 87111		ART UNIT	PAPER NUMBER	
			2878		
			DATE MAILED: 05/05/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati n No.	Applicant(s)			
Offic Action Summary		09/423,155	HEILAND, PETER			
		Examiner	Art Unit			
		Thanh X Luu	2878			
	The MAILING DATE of this communication app	ears on the cover sheet with the c				
Period f rR ply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.						
<ul> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>						
Status						
1)🛛	Responsive to communication(s) filed on 13 A	<u> April 2004</u> .				
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ Thi	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
•	Claim(s) <u>43-83</u> is/are pending in the applicatio					
	4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.					
· · ·						
	6)⊠ Claim(s) <u>43-83</u> is/are rejected. 7)□ Claim(s) is/are objected to.					
	Claim(s) are subject to restriction and/or	r election requirement				
· ·	ion Papers	election requirement.				
9) 🗌	The specification is objected to by the Examiner	ſ.				
10)⊠ The drawing(s) filed on <i>02 November 1999</i> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).			
11) 🔲 🤄	The proposed drawing correction filed on	is: a) ☐ approved b) ☐ disappro	ved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1)  Notic	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			

## **DETAILED ACTION**

This Office Action is in response to amendments and remarks filed April 13, 2004. Claims 43-83 are currently pending.

## Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the image display device embodied in an electron microscope; a calibrator that manually calibrates the filter; a force microscope, a lithography installation must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### Specification

- 2. The amendment filed February 26, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:
  - a. the internal nature of the control or actuator element;
- b. paragraph 035: the concept that an undistorted image of the reference object is stored previously;
  - c. paragraph 036: the term "undistorted image".

Applicant is required to cancel the new matter in the reply to this Office Action.

# Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 51-53, 62-79 and 81-83 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 51-53, 67, 68, 79 and 83, it appears that a "prestored undistorted image of the reference object" is new matter.

Regarding claim 62, it appears that a transmission electron microscope embodiment comprising a camera system and an actuator means for moving the camera system is new matter. As understood, such a scanning camera system is only disclosed with respect to a light microscope.

Regarding claims 63-78, it appears that the internal nature of the control element or actuator is new matter. Nowhere in the original disclosure does it show or state that the control element or actuator is internal.

Regarding claims 81 and 82, Applicant has failed to disclose of a light microscope having an electron beam.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 43-83 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 43, it is unclear in its given context what it means for an image acquirer to acquire pixels of said sample object. Pixels are picture elements of an image. It is unclear how pixels can be acquired from a physical sample object. In addition, it is unclear how "image degradations" exist if no image has been acquired. Further, it is unclear how "ambient influences that might interfere with proper imaging" becomes "ambient influences that have an adverse effect on imaging." Still further, it is unclear what scope the terms "greatly reduced or essentially compensated" covers.

Regarding claim 50, "said relative position" and "the scanner" lacks proper antecedent basis. Further, it is unclear what "of time controlled by the scanner" means.

Regarding claim 51, "the image" and "the image defects" lacks proper antecedent basis.

Regarding claim 52, "the reference objecting" lacks proper antecedent basis.

Regarding claim 55, "the image" lacks proper antecedent basis.

Regarding claim 59, it is unclear how a light microscope and a force microscope comprises an electron beam.

Regarding claim 61, "light" lacks proper antecedent basis.

Regarding claim 62, it is unclear how an image acquirer acquires pixels of a physical sample object. Further, it is unclear how "ambient influences that might interfere with proper imaging" becomes "ambient influences that have an adverse effect

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on imaging." In addition, it is unclear how "image degradations" exist if no image has been acquired. Still further, it is unclear what scope the terms "greatly reduced or essentially compensated" covers.

Regarding claim 63, it is unclear what "combining same" means. In addition, it is unclear how "image degradations" exist if no image has been acquired. Still further, it is unclear what scope the terms "greatly reduced or essentially compensated" covers.

Also, the claim lacks the essential step of imaging.

Regarding claim 67, "the image" lacks proper antecedent basis.

Regarding claim 68, Applicant's use of "said object" and "said sample object" creates antecedent basis problems.

Regarding claim 69, it is unclear how many actuators or control elements exist as an actuator or control element has already been claimed in claim 63.

Regarding claim 75, "any image acquired" lacks proper antecedent basis.

Regarding claim 77, it is unclear what scope the terms "greatly reduced or essentially compensated" covers.

Regarding claim 83, "the image" lacks proper antecedent basis.

### Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

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MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thanh X Luu

Primary Examiner

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